

FEDERAL GOVERNMENT STRATEGIC SOURCING OF INFORMATION PRODUCTS AND SERVICES

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PREFACE

This report describes the current landscape of the federal marketplace regarding the acquisition of information goods and services, including electronic databases, books, and serials. It compiles comprehensive data from fiscal year (FY) 1979 through the second quarter of FY2013 on the amount federal agencies have spent on these products and services and also identifies major vendors. In addition, the report forecasts through FY2015 the potential savings to the federal government if agencies purchased these products and services through a strategic-sourcing initiative. The data are presented in the form of tables, graphs, and charts, accompanied by narrative explanation and analysis.

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KEY FINDINGS

- Federal spending on 15 product service codes (PSCs) that can be reasonably considered to constitute a federal information market totaled \$9.0 billion from fiscal year (FY) 1979 through FY2012, an average of \$263 million annually.
- Federal agencies spent an additional \$222 million on those 15 PSCs in the first two quarters of FY2013, bringing total spending on information commodities to \$9.2 billion from the first quarter (Q1) of FY1979 through FY2013 Q2.
- In the most recent completed fiscal year—FY2012—federal spending on information commodities was \$591 million, the third highest annual total in the 34-year period from FY1979 through FY2012.
- In the last five complete fiscal years, i.e., FY2008 through FY2012, total federal spending on information products and services was \$2.8 billion, constituting 31 percent of all spending on these commodities from FY1979 through FY2012.
- Average annual spending in the last five completed fiscal years, FY2008 through FY2012, was \$559 million, far exceeding average annual spending for the longer period from FY1979 through FY2012.
- Average quarterly spending in the most recent five fiscal years (FY2009 through FY2013) was \$135 million, slightly more than double the quarterly average of \$66 million for the overall 35-year period from FY1979 through FY2013.
- From FY1979 Q1 through FY2013 Q2, six of the 15 information products and services accounted for 94 percent of federal spending on information commodities: Books and pamphlets (21 percent of total spending), Web-based subscriptions (21 percent), administrative support for federal libraries (16 percent), administrative support for information retrieval (12 percent), newspapers and periodicals (12 percent), and maps, atlases, charts, and globes (12 percent).
- In the most recent five-year period from FY2009 to FY2013 Q2, federal agencies have sharply reduced spending on maps, atlases, charts, and globes. Consequently, the aforementioned five products and services composed 96 percent of the federal information market.
- In the time span from FY1979 through FY2013 Q2, fewer agencies' spending exceeded 5 percent of total federal spending on information commodities: Defense (41 percent of total spending), Health and Human Services (10 percent), Commerce (6 percent), Justice (5 percent), and Treasury (5 percent).
- In the more recent period from FY2009 through FY2013 Q2, seven federal agencies each accounted for at least 5 percent of all federal spending on information products and services: Defense (24 percent of total federal spending), Health and Human Services (13 percent), Commerce (9 percent), Justice (7 percent), Veterans Affairs (7 percent), Treasury (6 percent),

and Homeland Security (5 percent). Collectively, these agencies' spending on information commodities constituted 72 percent of the total federal market for those products and services.

- Within the last five fiscal years from FY2009 through FY2013 Q2, 25 vendors received 50 percent of all federal spending on information products and services, and five of those vendors received 25 percent of all such spending: Reed Elsevier (\$223 million; 8 percent of all federal spending on information products and services); West Publishing Corporation (\$167 million; 6 percent); Arctic Slope Regional Corporation (\$135 million; 5 percent); Ebsco (\$96 million; 3 percent); and Swets & Zeitlinger (\$86 million; 3 percent).
- Federal spending on information commodities is forecast to be between \$590 million and \$596 million annually from FY2013 through FY2015.
- If federal agencies purchased information products and services through a strategic sourcing process—such as the existing Federal Strategic Sourcing Initiative—the federal government could save between \$20 million and \$360 million on those commodities depending on the amount of federal spending that is channeled through strategic sourcing procurement and the discount rates that are applied to that spending.

INTRODUCTION

This report provides an analysis of the federal government's spending on information products and services from fiscal year (FY) 1979 through the second quarter (Q2) of FY2013, as well as estimates of cost savings the federal government could realize from FY2013 through FY2015 by procuring information goods and services through a strategic-sourcing process. Among the topics analyzed herein are the products and services that compose the information market, the federal agencies that have been major purchasers of those products and services, and the contractors that have provided them. Throughout this report, data tables and graphs detail and illustrate the findings.

Briefly summarized, the findings are that from FY1979 through FY2012 (all complete fiscal years in the time period covered in this study), federal-government agencies spent an estimated \$9.0 billion—\$263 million annually—on print publications, electronic databases, information retrieval, and other commodities that can be collectively described as an "information market." In addition, federal agencies spent \$222 million on these commodities in the first two quarters of FY2013, bringing federal total spending on information products to \$9.2 billion from FY1979 Q1 through FY2013 Q2. If federal agencies procured information products and services through the federal government's existing strategic-sourcing program, the Federal Strategic Sourcing Initiative (FSSI), the federal government could realize savings in the range of \$20 million to \$360 million for the three-year period from FY2013 through FY2015 depending on the amount of federal spending that is procured through strategic sourcing methods. In addition to these direct savings on purchases, the government could realize indirect savings on labor and other costs associated with procurement.

METHODOLOGY

The data in this report come from the Federal Procurement Data System–Next Generation (FPDS–NG), an on-line database that the U.S. General Services Administration (GSA) Federal Procurement Data Center operates to publicly disclose information on federal procurement contracts, including funding agency, award amount, and award recipient. The FPDS–NG has been operational since October 2003, at which time it replaced a previous system, the Federal Procurement Data System, which the federal government had put into operation in 1978. The

Office of Management and Budget (OMB) maintains a similar Web site called USAspending.gov, which also provides data on procurement contracts and on grants and loans. While some previous iterations of this report used data from USAspending.gov, this report is based on data from the FPDS–NG because the latter provides data for a greater time span (FY1979 to present) than does USAspending.gov (FY2000 and later), thus allowing for better analyses of trends in federal spending.¹

The first step in the research process was to determine the categories of goods and services that can be reasonably considered to constitute an information market by identifying the "product service codes" (PSCs) that federal procurement contracts use to classify contracted products and services. The researcher concluded that 15 PSCs cover information commodities (see table 1, below, for a listing of these PSCs) and then used the FDPS–NG Web site's "ezSearch" to acquire data on the 15 PSCs from FY1979 Q1 through FY2013 Q2, i.e., from October 1, 1978, through March 31, 2013. Focusing on a) the federal agencies that awarded contracts for all 15 PSCs and b) the contractors that were awarded those contracts, the researcher downloaded nearly 180,000 records in comma-separated value-format (CSV-format) files, converted the files to Microsoft Excel, and then used Excel to produce the analysis detailed herein. The data are accurate as of April 5, 2013, the date on which they were downloaded. Future iterations of this report will incorporate spending data after FY2013 Q2.

It should be noted that there are some possible concerns with the data used in this analysis. Various observers, including federal government agencies, have raised concerns about the accuracy and completeness of data in procurement databases, such as the FPDS and USAspending.gov. Over time, GSA, OMB, and other federal agencies have undertaken efforts to address those concerns, which have led to improvements in the accuracy and completeness of data, particularly data for FY2004 and later. One such effort was the creation of the FPDS–NG

¹ U.S. Government Accountability Office (GAO), "Improvements Needed to the Federal Procurement Data System—Next Generation" (report no. GAO-05-960R, Washington, DC, September 27, 2005), http://www.gao.gov/assets/100/93613.pdf (accessed August 6, 2012); *USAspending.gov*, "Learn About USAspending.gov" (Washington, DC, n.d.), http://usaspending.gov/ learn?tab=FAQ (accessed April 15, 2012).

² To locate the relevant data in the FPDS-NG, the researcher used the "Adhoc Reports" feature of FPDS-NG's ezSearch. It should also be noted that the first iteration of this study used 16 PSCs in its analysis, and the second incorporated 15 PSCs. One of the PSCs in the first study of the federal information market—miscellaneous printed matter (PSC 7690)—was dropped in the second analysis of the topic because it included substantial spending on products and services that were determined not to be information products and services. See William Noël Ivey, "Federal Government Strategic Sourcing of Information Products and Services" (report, Federal Research Division, Library of Congress, Washington, DC, December 2011), 4, http://www.loc.gov/flicc/publications/FRD/Strategic-Sourcing-Version-2_2011-Dec-5-Corrected.pdf (accessed April 15, 2012).

system as a successor to FPDS.³ As a consequence of concerns that have been raised about federal procurement data available at the time the research for this analysis was completed (June 2013), the findings in this paper are presented with the caveats that the data upon which they are based may contain inaccuracies and that the comparability of data across years is likely limited but to an unknown extent.

OVERVIEW OF THE FEDERAL STRATEGIC-SOURCING INITIATIVE

In May 2005, OMB and the Office of Federal Procurement Policy issued a memorandum requiring federal agencies to identify commodities that the government could efficiently purchase through strategic sourcing. The document defined strategic sourcing as "the collaborative and structured process of critically analyzing an organization's spending and using this information to make business decisions about acquiring commodities and services more effectively and efficiently." Soon after, in November 2005, GSA and the Department of the Treasury launched the Federal Strategic Sourcing Initiative (FSSI), and the federal government later established individual FSSIs for domestic delivery services, office supplies, and wireless telecommunications services. ⁵ According to GSA, federal government agencies utilizing these FSSIs collectively saved \$1.1 million on domestic delivery services and \$2.7 million on office supplies in October 2012 and \$7.1 million on wireless services in FY2012. When these savings figures are stated as percentages, then federal agencies participating in these FSSIs jointly saved 26.5 percent of their spending on domestic delivery services, 13 percent on office supplies, and 18 percent on wireless services. 6 Studies of strategic sourcing by private-sector entities and by public-sector agencies outside of the United States have found similar rates of savings, ranging from 8 percent to 20 percent of procurement costs.⁷

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³ Michael Hardy, "Fixing the Next Generation Procurement Data System," *Federal Computer Week* 19, no. 40 (November 21, 2005): 65–66 (accessed via ProQuest, document ID 218835006); U.S. Government Accountability Office (GAO), "Improvements Needed to the Federal Procurement Data System–Next Generation."

⁴ U.S. Office of Management and Budget, "Implementing Strategic Sourcing" (memorandum, Washington, DC, May 20, 2005), http://www.uspto.gov/web/offices/ac/comp/proc/OMBmemo.pdf (accessed July 15, 2011).

⁵ U.S. General Sourcing, Administration, "About Strategic Sourcing," http://ctrategicgourging.gov/about.

⁵ U.S. General Services Administration, "About Strategic Sourcing," http://strategicsourcing.gov/about-strategic-sourcing (accessed July 26, 2011).

⁶ U.S. General Services Administration, "Strategic Sourcing Metrics," http://strategicsourcing.gov (accessed June 18, 2012).

⁷ Cathy Hayward, "Reforming the Old Bill," *Supply Management*, January 4, 2011, 21–23 (accessed via ProQuest, document ID 222195677); Carlos Niezen, Wulf Weller, and Heidi Deringer, "Strategic Supply Management," *MIT Sloan Management Review* 48, no. 2 (Winter 2007): 7 (accessed via ProQuest, document ID 2224964805).

DEFINING THE FEDERAL INFORMATION MARKET

In order to present an analysis of the federal government's spending on the "information market," it is necessary to define the term operationally as it is used in this paper. The U.S. federal government does not formally define the term "information market," and no widely referenced definition of this term or variants of it appear in academic or industry research on publishing and other aspects of the information industry. However, a taxonomy of products and services that constitute an information market can be constructed from classification systems that federal agencies use in procurement contracts. One such system is the aforementioned PSCs, specifying goods and services purchased under government procurement contracts, and another is the North American Industry Classification System (NAICS), which outlines categories of industries and commercial activities that provide products and services.⁸

The information in this report is based on data organized by PSC rather than NAICS categories, because PSC categories are more appropriate for identifying procured products and services. In federal procurement contracts, PSC designations identify the procured products and services, whereas NAICS classifications specify only the industries that produce and distribute goods and services. 9 Moreover, federal contract data on PSC classifications are more readily available than are contract data organized by NAICS categories, as the former are almost invariably listed in procurement contract data records available through the FPDS-NG and USAspending.gov, and the latter are often not included in those records.

Based on PSC classifications, 15 categories of products and services can be considered to be components of the federal government's information market. These products and services, which are listed in table 1 (see below), consist of a diverse array of commodities, including books, electronic databases, and library services. For formal definitions of these PSCs, see table 8 in Appendix 2.

One finding that emerges from the data in table 1 is that federal government agencies spent around \$9 billion on information products and services in the 34-year period from FY1979 through FY2012. In addition, federal agencies spent nearly 27 percent of those funds (\$2.4

⁸ U.S. General Services Administration, "Frequently Asked Questions About FPDS-NG," https://www.acquisition. gov/faqs_whataboutfpds.asp#q16 (accessed July 28, 2011).

9 U.S. Census Bureau, 2007 NAICS Definitions (Washington, DC, 2007), n.p. [page 376 of downloadable PDF],

http://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart=2007 (accessed July 19, 2011).

billion) in the last five fiscal years, FY2009 through FY2013 Q2. Average spending was nearly \$260 million annually from FY1979 through FY2012 and even higher in the last five complete fiscal years—FY2008 through FY2012—at nearly \$560 million annually, an indicator of growing government spending on information products and services. The data also reveal that in the first two quarters of FY2013 federal agencies spent an additional \$222 million on information commodities, which brought total federal spending on these products and services to \$9.2 billion from FY1979 Q1 through FY2013 Q2.

These spending figures, however, may undercount the actual value of the information market, because they include only contract values for PSCs that can be reasonably categorized as part of an information market and not contracts for information products and services listing PSCs that cannot be so classified. For example, the \$9.2 billion in federal spending on information products and services from FY1979 through FY2013 Q2 does not include several federal contracts with Reed Elsevier and West Publishing for the LexisNexis and Westlaw electronic databases that listed PSCs such as PSC 7030 "ADP [automatic data processing] software," R499 "Other professional services," and T003 "Cataloging services."

Table 1. Federal Information Market, Products and Services, FY1979-FY2013 Q2

Products and Services (Product Service Code)	Contracts (in \$ millions) FY1979– FY2013 Q2	Percentage of Total Contracts	Contracts (in \$ millions) FY2009– FY2013 Q2	Percentage of Total Contracts
Books and pamphlets (7610)	\$1,971.6	21.5%	\$615.5	25.3%
Web-based subscriptions (D317)	\$1,889.9	20.6%	\$464.6	19.1%
Administrative support: Library (R605)	\$1,511,4	16.5%	\$441.1	18.1%
Administrative support: Information Retrieval (R612)	\$1,126.9	12.3%	\$455.6	18.7%
Newspapers and periodicals (7630)	\$1,073.3	11.7%	\$363.0	14.9%
Maps, atlases, charts, and globes (7640)	\$1,062.9	11.6%	\$7.9	0.3%
Microfilm processed (7670)	\$196.9	2.1%	\$3.0	0.1%

Table 1. Federal Information Market, Products and Services, FY1979-FY2013 Q2

Products and Services (Product Service Code)	Contracts (in \$ millions) FY1979– FY2013 Q2	Percentage of Total Contracts	Contracts (in \$ millions) FY2009– FY2013 Q2	Percentage of Total Contracts
Drawings and specifications (7650)	\$185.0	2.0%	\$26.9	1.1%
Digital maps, charts, and geoditic products (7644)	\$86.9	0.9%	\$26.7	1.1%
Technical representation services—Books, maps, other publications (L076)	\$46.8	0.5%	\$21.1	0.9%
Aeronautical maps, charts, and geodesic products (7641)	\$8.1	0.1%	\$4.9	0.2%
Sheet and book music (7660)	\$7.0	0.1%	\$0.6	0.0%
Topographic maps, charts, and geodesic products (7643)	\$3.4	0.0%	\$1.9	0.1%
Hydrographic maps, charts, and geodesic products (7642)	\$2.3	0.0%	\$1.4	0.1%
Books, maps, other publications (76)	\$0.0	0.0%	\$0.0	0.0%
Total	\$9,172.4	100.0%	\$2,434.2	100.0%

Another finding is that federal-government spending on information products and services has fluctuated but has shown an overall increase over time. During the time span for which the FPDS–NG provides spending data on information products and services for completed fiscal years—i.e., the period from FY1979 through FY2012—spending on information commodities increased from \$76 million in FY1979 to \$276 million in 2000 and then to \$530 million in 2010. In FY2011 spending grew even further to nearly \$583 million. Spending for FY2012 was \$591 million, but this and other figures for recent fiscal years may change as federal agencies continue to input and update spending data for those years into FPDS–NG. Figure 1, below, depicts the change in federal spending on information products and services

from FY1979 through FY2012, with specific figures listed for FY1980 and for 10-year intervals thereafter (i.e., spending figures for FY1980, FY1990, FY2000, etc).

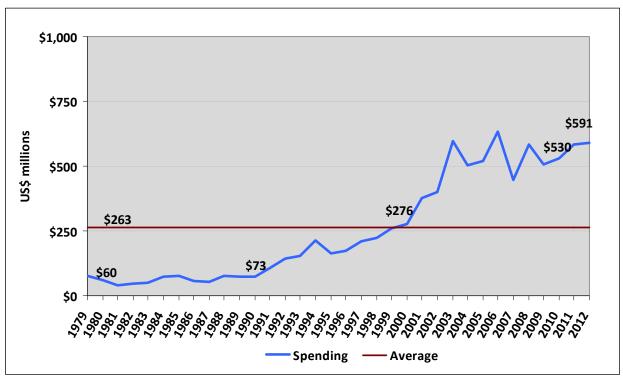


Figure 1. Value of the Federal Information Market by Fiscal Year, FY1979-FY2012

If the increase in federal spending on information products and services is expressed in terms of ratios rather than dollar figures, then spending on information products and services was largely unchanged between FY1980 and FY1990 but was nearly five times greater in FY2000 than in FY1980. As federal procurement of information commodities continued to expand, spending ratios increased as well. Spending in FY2010 was nearly nine times greater than in FY1980, and spending in FY2012 was almost 10 times greater than in FY1980. These ratios are depicted in figure 2, below, by spheres whose relative sizes reflect the growth in federal spending on information commodities since FY1980, the base year of comparison in the graph.

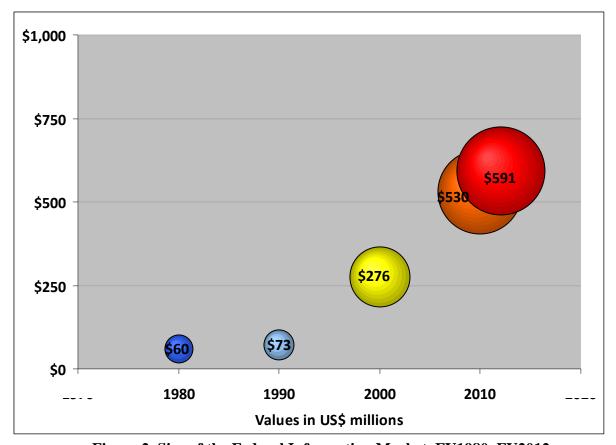


Figure 2. Size of the Federal Information Market, FY1980–FY2012

While federal spending on information commodities generally increased from FY1979 through FY2013 Q2, it also fluctuated substantially within that time span. Federal spending on information commodities has occasionally exhibited both increases and declines of \$50 million or more from one quarter to the next. These variations are depicted in figure 3, below, which shows federal spending on information products and services for all completed fiscal quarters from FY1979 Q1 through FY2013 Q2. (The horizontal axis of figure 3 lists only the first quarter—Q1—of each year because of space limitations.) Figure 3 illustrates that spending on information commodities has trended upward but has proven to be quite variable from quarter to quarter, and that average spending by quarter was \$66 million for the time period.

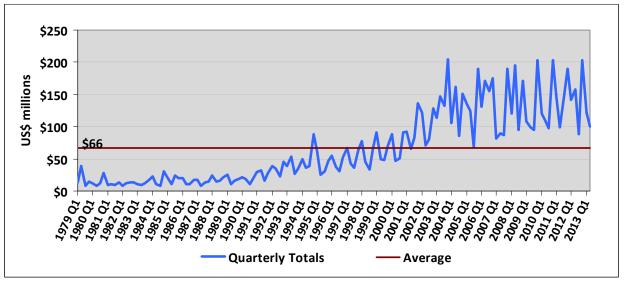


Figure 3. Value of the Federal Information Market by Quarter, FY1979-FY2013 Q2

Within the most recent five years, i.e., FY2009 through FY2013 Q2, spending varied substantially but at higher dollar levels than for the near 35-year period from FY1979 through FY2013 Q2. In that five-year period, spending generally ranged from \$100 million to \$200 million per quarter and sometimes grew or fell by \$100 million between quarters. In addition, average quarterly spending was \$135 million, more than double the quarterly average of \$66 million for the longer time span from FY1979 through FY2013 Q2 (see figure 4, below).

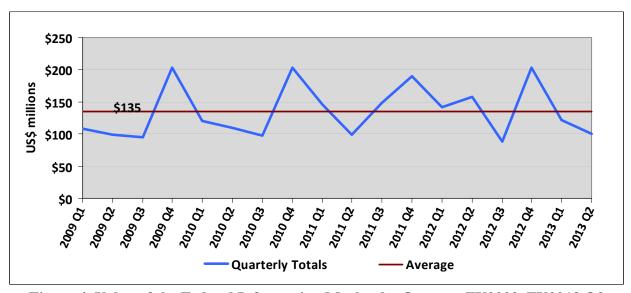


Figure 4. Value of the Federal Information Market by Quarter, FY2009-FY2013 Q2

Substantial variations in spending within fiscal years are also apparent in comparisons of average spending for the four fiscal quarters from the first complete decade in this study, the 1980s, through the current decade in this analysis, the 2010s. ¹⁰ In the 33-year time span between FY1980 and FY2012, the federal government's average spending on information products and services was highest in the fourth quarter (\$89 million) and lowest in the third (\$51 million). Average quarterly spending for the first and second quarters fell between those two extremes, at \$67 million for the first quarter and \$61 million in the second (see figure 5, below).

However, when quarterly spending is disaggregated by decade from FY1980 through FY2012, then the aforementioned pattern in quarterly spending does not hold. In the first decade of that time span, i.e., from FY1980 through FY1989, average first-quarter spending on information products (\$17 million) was nearly the same as average fourth-quarter spending (\$20 million). This near-parity in quarterly spending was also evident in the following decade (FY1990 through FY1999), as average first-quarter spending (\$53 million) was nearly equal to average fourth-quarter spending (\$52 million). The pattern in quarterly spending changed in the subsequent decade (FY2000 through FY2009) as average first-quarter spending (\$110 million) dropped well below average fourth-quarter spending (\$164 million), and it has thus far continued into the three complete years of the fourth and current 10-year period in this study (i.e., FY2010 through FY2012). In sum, federal spending on information products has grown substantially over time and also has exhibited increasing variability both between and within fiscal years.

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¹⁰ Quarterly spending on information products for FY1979 was \$13.5 million in Q1, \$39.1 million in Q2, \$8.7 million in Q3, and \$14.9 million in Q4, totaling \$76.2 million for the year. However, quarterly spending for FY1979 is not included here, because of an effort to examine decade-by-decade changes in average quarterly spending. FY1979 is the only year in the 1970s for which the FPDS–NG provides spending data on the PSCs that constitute information products and services, and a single year is insufficient for inclusion in an analysis by decade. The comparison by decade herein does include just three years for the decade FY2010 to FY2019—i.e., the years FY2010 through FY2012—which are of limited comparability in an analysis of decades. Nonetheless, the researcher has included these years in this analysis because the recent nature of the data may make them of interest to readers.

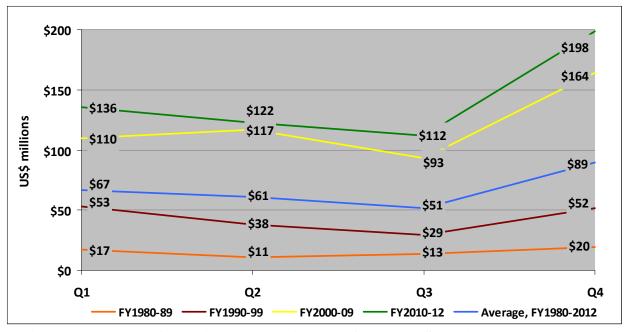


Figure 5. Federal Information Market, Average Quarterly Spending, FY1980–FY2012

With regard to the major products and services in the information market, six of the 15 types of information products and services accounted for 94 percent of federal-government spending on the information market, as measured by contract value from FY1979 through FY2013 Q2. Those products and services include books and pamphlets (21 percent of total spending); Web-based subscriptions (21 percent): administrative support for federal libraries (16 percent) and for information retrieval (12 percent); newspapers and periodicals (12 percent); and maps, atlases, charts, and globes (12 percent) (see table 1, above, and figure 6, below). These commodities illustrate the multidimensional nature of the federal information market, encompassing electronic resources, print media, and professional individual assistance.

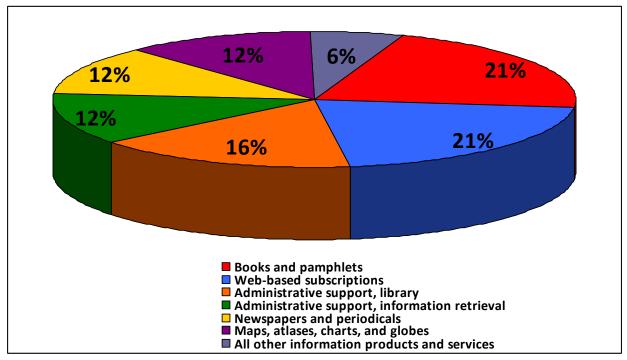


Figure 6. Federal Information Market FY1979-FY2013 Q2, Products and Services

Just as federal spending on the information market as a whole has varied over time, federal spending on specific products and services within that market also has fluctuated over time. Most federal spending on information commodities has largely gone to a few products and services, although new products and services have become prominent in this market, some only for a few years, others on a more enduring basis. Three commodities have consistently received a high proportion of total federal spending on information products and services: administrative support for federal libraries (PSC R605), books and pamphlets (7610), and newspapers and periodicals (7630). In the 1990s, Web-based subscriptions (D317) and administrative support for information retrieval (R612) emerged as prominent commodities and have remained so throughout the period of observation in this report. By some contrast, the commodity group maps, atlases, charts, and globes (7640) also became prominent in the federal information market during the 1990s but has since declined significantly as a component of the overall market. Federal spending on this commodity group peaked at \$195 million in FY2003—34 percent of the entire information market for that year—and then ranged from \$131 million to \$146 million from FY2004 through FY2006. Thereafter, however, the decline in federal spending on this product

category has been substantial, falling precipitously to \$4 million in FY2007 and to \$2.6 million by FY2012 (see figures 7 and 8, below).

In addition, spending on the major elements of the federal government's information market has exhibited some interesting—and, perhaps, surprising—changes. For example, in the FY1997–FY2003 time period, the Internet and electronic media emerged as prominent sources of information, and federal spending on Web-based subscriptions was higher than for most other information commodities. Although the Internet and electronic media have continued to be prominent information sources, federal spending on Web-based subscriptions declined substantially from FY2004 to FY2006 and fluctuated thereafter. Federal spending on two commodity groups—books and pamphlets and administrative support for libraries—also fluctuated from FY1997 to FY2012 but often exceeded spending on Web-based subscriptions (see figures 7 and 8, below). The proportion of spending on books and pamphlets that was on electronic and print publications cannot be determined from the data since such designations are not contained in federal procurement data in FPDS–NG, and many of the vendors of books and pamphlets publish both electronic and print materials.

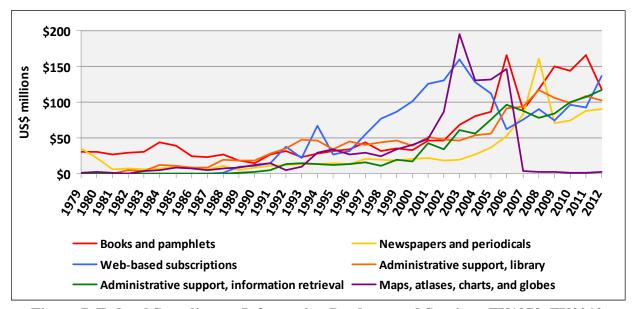


Figure 7. Federal Spending on Information Products and Services, FY1979-FY2012

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¹¹ The drop in federal spending on Web-based subscriptions (PSC D317) appears to have been due to reductions in spending by three federal agencies. More specifically, between FY2005 and FY2006 the Federal Acquisition Service reduced its spending with Computer Sciences Corporation by \$13.9 million, the Bureau of Public Debt decreased its spending with Forrester Research, Inc. by \$13.2 million, and the National Institutes of Health reduced its spending with Aspen Systems Corporation by \$7.7 million, a total drop in spending of \$34.9 million. All of these calculations are based on data downloaded from FPDS–NG.

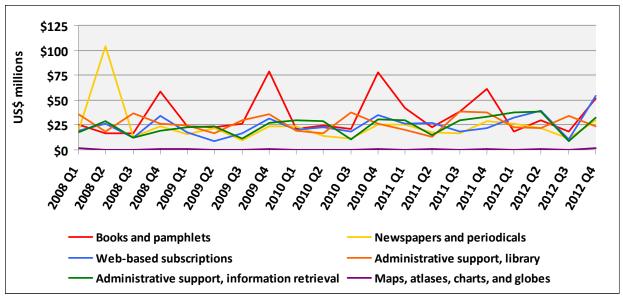


Figure 8. Federal Spending on Information Products and Services, FY2008–FY2012

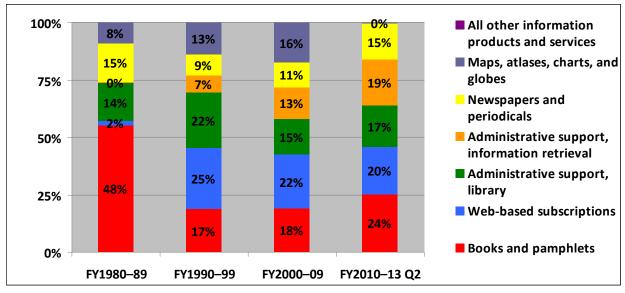


Figure 9. Federal Spending on Information Products and Services, by Decade

The recent fluctuations in federal spending on various information commodities have meant that a smaller range of commodities have dominated the overall federal information market in the last five fiscal years (FY2009–FY2012 Q2) than in the 34-year period from FY1979 through FY2012 Q2. As federal spending on maps, atlases, charts, and globes has declined in the last five fiscal years, spending on five other commodities has grown and now accounts for the bulk of spending on the total information market. More specifically, federal

spending on five commodities—books and pamphlets, administrative support for libraries, newspapers and periodicals, Web-based subscriptions, and administrative support for information retrieval—accounted for 82 percent of the federal information market for the overall period from FY1979 through FY2012 Q2 but nearly 96 percent of that market in the most recent five-year span from FY2009 through FY2012 Q2 (see figure 6, above, figure 10, below, and Appendix 3).

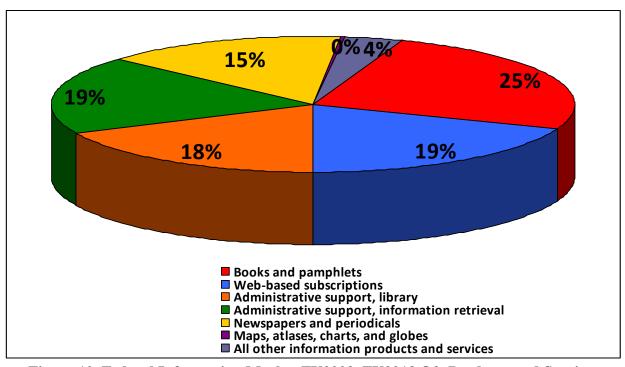


Figure 10. Federal Information Market FY2009-FY2013 Q2, Products and Services

INFORMATION MARKET SPENDING BY FEDERAL AGENCIES

Fy2013 Q2 varied substantially from agency to agency, from approximately \$8.6 million (National Science Foundation) to nearly \$3.8 billion (Department of Defense). Furthermore, spending by federal agencies on information products and services from Fy1979 through Fy2013 Q2 averaged approximately \$370 million per agency (see table 2, below).

Table 2. Federal Agencies' Spending on Information Products and Services, FY1979–FY2013 Q2

FY1979-FY2013 Q2	Spending		Spending	
Department	(in US\$ millions) FY1979– FY2013 Q2	Percent of Total	(in US\$ millions) FY2009– FY2013 Q2	Percent of Total
Department of Defense	\$3,801.9	41.4%	\$593.1	24.4%
Department of Health and Human Services	\$931.8	10.2%	\$310.4	12.8%
Department of Commerce	\$527.2	5.7%	\$228.6	9.4%
Department of Justice	\$483.9	5.3%	\$175.2	7.2%
Department of the Treasury	\$459.8	5.0%	\$149.5	6.1%
Environmental Protection Agency	\$379.1	4.1%	\$109.3	4.5%
General Services Administration	\$369.0	4.0%	\$44.0	1.8%
Department of Veterans Affairs	\$365.9	4.0%	\$161.9	6.6%
All Other Agencies	\$333.0	3.6%	\$123.9	5.1%
Social Security Administration	\$206.4	2.3%	2.3% \$79.7	
Department of Homeland Security	\$204.5	2.2%	\$128.6	5.3%
Department of the Interior	\$188.0	2.0%	\$63.1	2.6%
Department of Transportation	\$142.3	1.6%	\$19.0	0.8%
Department of State	\$140.7	1.5%	\$72.4	3.0%
National Aeronautics and Space Administration	\$127.9	1.4%	\$23.7	1.0%
Department of Agriculture	\$127.7	1.4%	\$37.4	1.5%
Department of Energy	\$94.9	1.0%	\$21.0	0.9%
Department of Education	\$81.2	0.9%	\$47.5	2.0%
United States Agency for International Development	\$66.2	0.7%	\$4.7	0.2%
Department of Labor	\$49.3	0.5%	\$15.7	0.6%
Department of Housing and Urban Development	\$39.5	0.4%	\$7.0	0.3%

Table 2. Federal Agencies' Spending on Information Products and Services, FY1979–FY2013 O2

Department	Spending (in US\$ millions) FY1979– FY2013 Q2	Percent of Total	Spending (in US\$ millions) FY2009– FY2013 Q2	Percent of Total
Nuclear Regulatory Commission	\$22.3	0.2%	\$8.5	0.3%
Office of Personnel Management	\$12.1	0.1%	\$3.6	0.1%
Small Business Administration	\$9.2	0.1%	\$4.6	0.2%
National Science Foundation	\$8.6	0.1%	\$1.7	0.1%
Total	\$9,172.4	100%	\$2,434.2	100%
Average	\$366.9		\$97.4	

Five agencies accounted for nearly 68 percent of all contracts for information products and services from FY1979 through FY2013 Q2, which, in dollar terms, represented \$6.2 billion in spending during that period. Those five agencies were: Defense (41 percent of total spending), Health and Human Services (10 percent), Commerce (6 percent), Justice (5 percent), and Treasury (5 percent) (see table 2, above, and figure 11, below). In the most recent five-year period, i.e. FY2009 through FY2013 Q2, these five agencies have accounted for a slightly lower proportion of the federal information market—60 percent—and two additional agencies have emerged as prominent purchasers of information commodities, namely the departments of Homeland Security and Veterans Affairs. Each of these seven agencies has accounted for at least 5 percent of federal spending on information products and services, and collectively these agencies' spending on these commodities has constituted 72 percent of the total federal market for information products and services (see table 2, above, and figure 12, below).

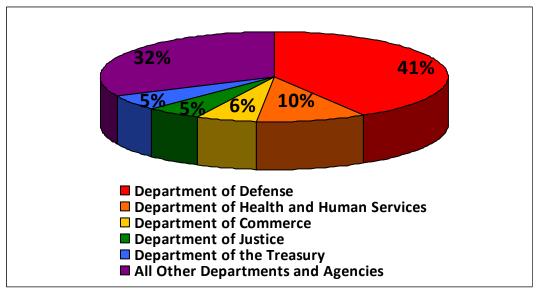


Figure 11. Federal Information Market Spending by Agency as a Proportion of Total Spending, FY1979–FY2013 O2

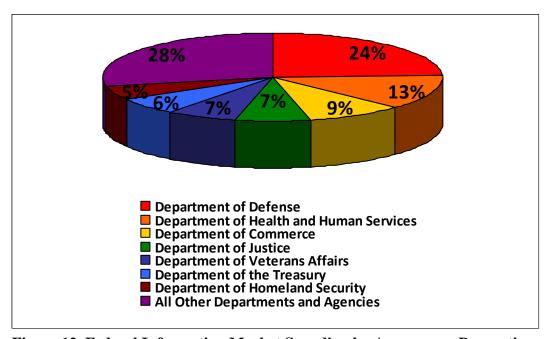


Figure 12. Federal Information Market Spending by Agency as a Proportion of Total Spending, FY2009–FY2013 Q2

Departments' spending on information products and services fluctuated during the complete fiscal years in this study, FY1979 through FY2012, but in general most departments' spending on information commodities either remained essentially constant or trended upward over the period. One apparent exception to this trend was the Department of Defense, as

available data indicate a precipitous decline in that agency's spending on information commodities after 2006 (see figure 13, below).

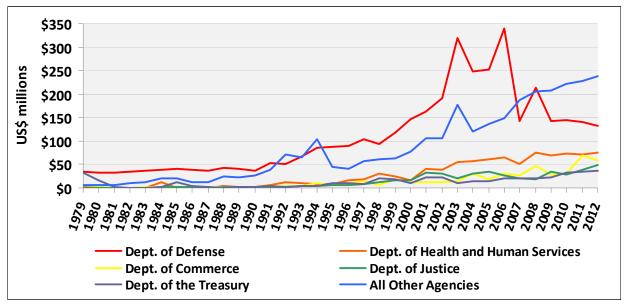


Figure 13. Federal Information Market, Top Federal-Agency Spending Trends, FY1979–FY2012

A better understanding of the federal entities that have been prominent buyers of information products and services emerges from examining the spending by agencies within federal departments. Federal procurement contracts specify a "contracting agency" that is sometimes listed as a department, such as the Department of State, but more often is listed as an agency within a department, such as the National Institutes of Health (NIH), which falls under the Department of Health and Human Services. In other cases, specific contracting agencies are difficult to determine, because the particular agency is vaguely listed, such as "Department of Defense Educational Activity." Despite these issues, federal procurement data from the FPDS–NG do allow for a detailed understanding of federal spending on the information products and services below the departmental level.

Specifically, from FY1979 through FY2012, several agencies under the Department of Defense were among the major purchasers of information products and services, namely the National Geospatial-Intelligence Agency (NGA), the departments of the Air Force, Army, and Navy, the aforementioned Department of Defense Educational Activity, and the Defense Logistics Agency (see figure 14, below). These six agencies collectively spent \$3.6 billion on

information products and services, accounting for 40 percent of all federal-government spending in the information market. Other agencies that were prominent in the market were the NIH (\$651 million in spending; 7 percent of overall spending), Environmental Protection Agency (\$368 million; 4 percent), and Patent and Trademark Office (also \$368 million; 4 percent).

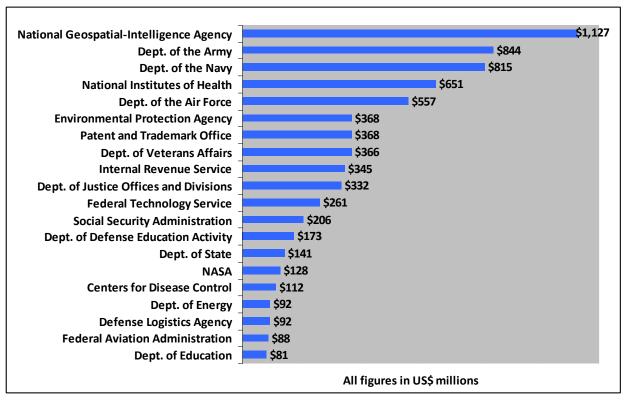


Figure 14. Federal Information Market FY1979–FY2013 Q2, Top-Spending Federal Agencies

With some exceptions, the agencies that were major purchasers from FY1979 through FY2013 Q2 have remained so within the last five years of that period, i.e., FY2009 through FY2013 Q2. One such exception is the NGA, which spent more on information commodities than any single agency from FY1990 through FY2006 but has since dropped completely out of the information market, at least as far as can be determined from unclassified procurement data (see figure 15, below).

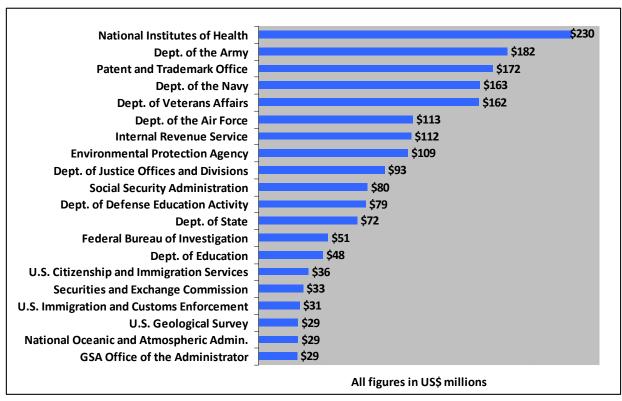


Figure 15. Federal Information Market, Top-Spending Federal Agencies, FY2009–FY2013 Q2

CONTRACTORS IN THE FEDERAL INFORMATION MARKET

From FY1979 through FY2013 Q2, federal agencies contracted with thousands of organizations to provide the 15 categories of information products and services listed in table 1 (see above). Among this multitude of contractors, six vendors stood out for receiving one-fifth of all contracts, as measured by the value of those contracts. The top contractor for information commodities for the federal government was Reed Elsevier with \$442.4 million in contracts, followed by Space Imaging LLC¹² (\$392.8 million), West Publishing Corporation (\$354.5 million), DynCorp Information Systems (\$265.4), Ebsco (\$260.1), and Arctic Slope Regional Corporation (\$260.0). These six companies collectively received nearly \$2 billion in federal-government contracts for information products and services, nearly 22 percent of all contracts, as measured by contract value.

¹² In 2006 Orbital Imaging Corporation (also known as ORBIMAGE) purchased Space Imaging LLC's assets and formed the company GeoEye. See GeoEye, "About Us," http://www.geoeye.com/CorpSite/about-us/ (accessed July 29, 2011).

These and other contractors appear in table 3, below, which lists the top 10 recipients of federal-government contracts for information products and services from FY1979 to FY2013 O2 (table 10 in Appendix 3 lists the top 50 vendors for the period). These 10 contractors collectively received \$2.6 billion in contracts for information commodities, over a quarter (i.e., 28 percent) of the information market for that period.

It is important to note that information in table 3 is intended to be a readily accessible listing of the prominent contractors in the federal information market, but the data are presented in a slightly different manner than in previous versions of this report. In earlier iterations of this analysis, vendor data included combined contract data for both parent companies and their subsidiaries. This approach, however, did not present data for subsidiary companies that are prominent vendors for federal agencies, such as West Publishing, which is a subsidiary of Thomson Reuters. The table now provides data for companies as stated in the FPDS-NG, and parent companies are listed in parentheses after their subsidiaries, such as "West Publishing Corp. (Thomson Reuters)."13

Table 3. Top 10 Contractors in the Federal Information Market, FY1979-FY2012

Contractor (Parent Company in Parentheses)		Contracts (in \$ millions)	Pct. of All Contracts
1	Reed Elsevier	\$442.4	4.8%
2	Space Imaging (GeoEye)	\$392.8	4.3%
3	West Publishing Corp. (Thomson Reuters)	\$354.5	3.9%
4	DynCorp Information Services (Computer Sciences Corp.)	\$265.4	2.9%
5	Ebsco	\$260.1	2.8%
6	Arctic Slope Regional Corp.	\$260.0	2.8%

¹³ It should be noted that the amounts in table 3 differ from those provided in the equivalent tables in previous iterations of this report, with some vendors showing lower amounts and others showing higher amounts. These variations are the result of the discontinuation of one product service code (PSC) in these calculations (PSC 7690; see footnote 1), updated data available from the FPDS-NG, and data for subsidiary companies listed separately from their parent companies. In addition, previous iterations of this report incorrectly listed data for DynCorp Information Services as data for its parent company Computer Sciences Corporation (CSC); this version of the report lists DynCorp data separately from CSC.

Table 3. Top 10 Contractors in the Federal Information Market, FY1979–FY2012

Contractor (Parent Company in Parentheses)	Contracts (in \$ millions)	Pct. of All Contracts
7 DigitalGlobe	\$175.9	1.9%
8 Gartner, Inc.	\$165.1	1.8%
9 IHS Global	\$148.1	1.6%
10 Swets & Zeitlinger	\$117.1	1.3%
Total	\$2,581.4	28.1%

In the most recent five-year period, some indicators suggest that the federal information market has become consolidated by the major vendors in the market. With some exceptions, the major providers of information products and services for the period from FY1979 through FY2013 Q2 were also the major vendors for those commodities in the last five-year period from FY2009 through FY2013 Q2, at least as measured by the value of the contracts those vendors signed with federal agencies (see table 4, below). Moreover, a smaller number of vendors accounted for the majority of information commodities in the last five fiscal years than in the longer 35-year period stretching back to 1979. Specifically, 45 vendors accounted for 50 percent of the federal information market from FY1979 through FY2013 Q2, whereas 25 vendors accounted for 50 percent of that market from FY2009 through FY2013 Q2 (see tables 10 and 11, Appendix 3). Moreover, eight vendors received 25 percent of all federal spending on information commodities from FY1979 through FY2013 Q2, whereas five companies received the same percentage of federal spending on information products and services in the most recent five fiscal years (FY2009 through FY2013 Q2). Similarly, the top 50 vendors accounted for 52 percent of the federal information market from FY1979 through FY2012, and the top 50 vendors in the last five fiscal years from FY2009 through FY2013 O2 accounted for nearly 62 percent of the market.

The declining number of vendors providing the majority of information products and services to the federal government appears to reflect two trends. One is a growing consolidation

of companies in the information market as some firms acquire others. Another is the fact that many of these vendors have received the majority of their federal procurement funding for information commodities within the last five fiscal years (again, FY2009 through FY2013 Q2). More specifically, 18 of the top 50 vendors experienced 50 percent or more of their information commodity sales in the most recent five-year period, and an additional 7 of the top 50 vendors realized 25 percent or more of their information commodity sales in that same period. For example, long-established organizations such as the American Chemical Society, Dun & Bradstreet, Pearson Education, Reed Elsevier, and Swets & Zeitlinger have provided information products and services to the federal government since FY1995 or earlier, and all of these entities have experienced more than 50 percent of their information commodity sales to the federal government in the last five fiscal years (see table 11, below, in appendix 3).

Table 4. Top 10 Contractors in the Federal Information Market, FY2009–FY2013 O2

()	Contractor Parent Company in Parentheses)	Contracts (in \$ millions)	Pct. of All Contracts
1	Reed Elsevier	\$222.8	8.0%
2	West Publishing Corp. (Thomson Reuters)	\$167.3	6.0%
3	Arctic Slope Regional Corp.	\$135.1	4.8%
4	Ebsco	\$96.4	3.4%
5	Swets & Zeitlinger	\$85.9	3.1%
6	American Chemical Society	\$76.6	2.7%
7	Dun & Bradstreet	\$57.0	2.0%
8	Misc. Foreign Contractors/ Awardees	\$50.7	1.8%
9	Alutiiq Business Services (Afognak Native Corp.)	\$50.0	1.8%
Computer Sciences Corp./ CSC Information Systems		\$46.0	1.6%
	Total	\$987.7	35.4%

The data in tables 3 and 4 indicate the major vendors in the overall information market, but not the major vendors for particular information products and services. Appendix 3 contains tables listing the major vendors for the top five information commodities for the previous five fiscal years, i.e., FY2009 through FY2013 Q2. Those five commodities were (in declining order of their proportion of the market; see figure 8, above): books and pamphlets, Web-based subscriptions, administrative support for libraries, administrative support for information retrieval, and newspapers and periodicals.

BENEFITS OF A STRATEGICALLY SOURCED INFORMATION MARKET

Thus far, the analysis of the federal information market has examined the market as it has existed without a federal strategic-sourcing program for information products and services. Calculations based on existing spending figures suggest that an initiative to strategically source information products and services could yield substantial savings on these products and services. If, for example, information commodities were covered by an FSSI in FY2012, the federal government could have saved in the range of nearly \$30 million to \$120 million on information products and services. This range of savings is based on different scenarios of 5-percent to 20percent savings on those commodities, reflecting the aforementioned discounts that federal agencies have realized in existing strategic-sourcing initiatives administered by GSA (see Overview of the Federal Strategic Sourcing Initiative, above). The savings scenarios for information commodities are detailed in table 5 and illustrated in figure 16, below. It is helpful to note that in figure 16, the tops of the colored-bar segments indicate the total spending levels that could be realized through strategic sourcing of information commodities at different discount rates. Specifically, spending on such commodities with no discount is depicted by the top of the red segments, spending with a 5-percent discount is depicted by the top of the orange segments, spending at a 9-percent discount is depicted by the top of the yellow segments, and so on.

Table 5. FY2012 Spending by Agency Under Different Savings Scenarios

Agency	No FSSI	5%	6	9%	/ ₀	209	0/0
Agency	Spending	Spending	Savings	Spending	Savings	Spending	Savings
Department of Defense	\$131.4	\$124.8	\$6.6	\$119.5	\$11.8	\$105.1	\$26.3
Department of Health and Human Services	\$75.8	\$72.0	\$3.8	\$69.0	\$6.8	\$60.6	\$15.2
Department of Commerce	\$59.5	\$56.6	\$3.0	\$54.2	\$5.4	\$47.6	\$11.9
Department of Justice	\$49.3	\$46.8	\$2.5	\$44.9	\$4.4	\$39.4	\$9.9
Department of Homeland Security	\$40.5	\$38.5	\$2.0	\$36.8	\$3.6	\$32.4	\$8.1
Department of the Treasury	\$36.5	\$34.7	\$1.8	\$33.3	\$3.3	\$29.2	\$7.3
Department of Veterans Affairs	\$35.1	\$33.3	\$1.8	\$31.9	\$3.2	\$28.1	\$7.0
All other agencies	\$163.4	\$155.2	\$8.2	\$148.6	\$14.7	\$130.7	\$32.7
Total	\$591.4	\$561.9	\$29.6	\$538.2	\$53.2	\$473.1	\$118.3
All figures are in \$ millions.							

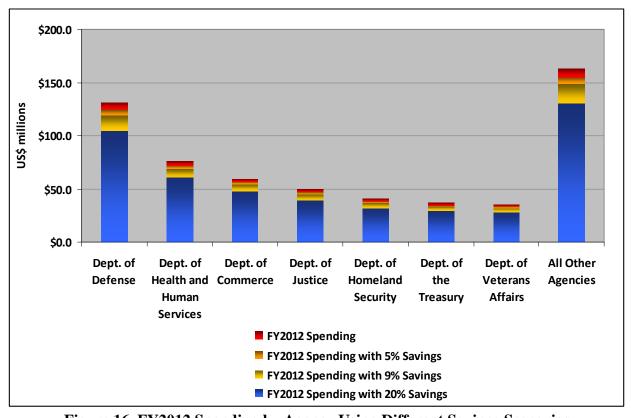


Figure 16. FY2012 Spending by Agency Using Different Savings Scenarios

The savings the federal government could realize through strategic-sourcing arrangements are magnified even further if the aforementioned rates of savings are applied to the entire period covered by this analysis, FY1979 through FY2013 Q2. Specifically, if the federal government had strategic-sourcing initiatives in place that covered all of the PSCs that constitute the federal information market as it is defined in this analysis, the government could have saved between nearly \$460 million and \$1.8 billion (respectively, 5-percent and 20-percent savings on the aforementioned total spending of \$9.2 billion for the period FY1979 through FY2013 Q2; see figure 17, below). The \$1.8 billion in savings that could have been realized through a 20-percent discount on spending in this 35-year time span exceeds the \$1.7 billion federal spending on information commodities in the last three completed fiscal years (\$532 million in FY2010, \$583 million in FY2011, and \$591 million in FY2012).

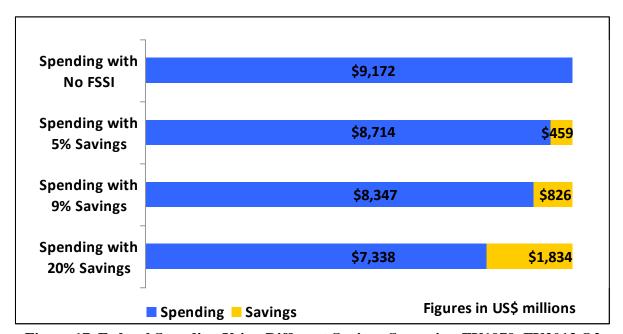


Figure 17. Federal Spending Using Different Savings Scenarios, FY1979–FY2013 Q2

Depicting the various savings rates against the trend in information-commodity spending for all complete fiscal years (FY1979 to FY2012) in this study also shows how financially beneficial strategic sourcing could have been for the federal government. The following three graphs show actual federal spending on information commodities along with federal spending on those products and services at discounts of 5 percent, 9 percent, and 20 percent (see figures 18, 19, and 20). In particular, the graph depicting spending at a 20-percent discount illustrates how different the federal market would have been, rarely exceeding \$500 million in any fiscal year.

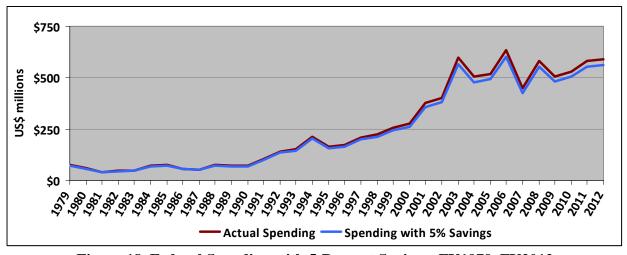


Figure 18. Federal Spending with 5-Percent Savings, FY1979–FY2012

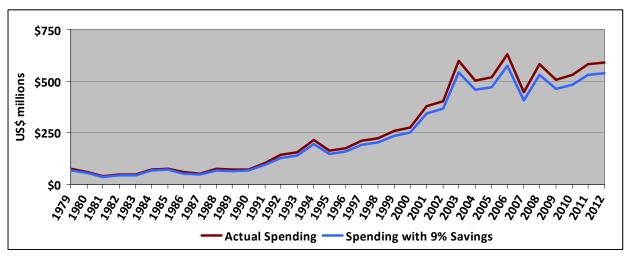


Figure 19. Federal Spending with 9-Percent Savings, FY1979–FY2012

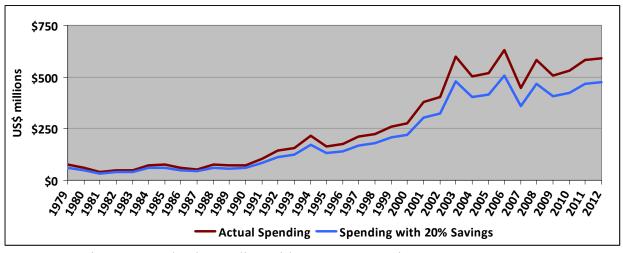


Figure 20. Federal Spending with 20-Percent Savings, FY1979–FY2012

With regard to the potential savings that strategic sourcing could provide for information products and services in the years beyond FY2012, the spending trend in the information market from FY1979 through FY2012 suggests that the market can be projected to remain close to the spending levels of FY2011 and FY2012. Specifically, in FY2011 and FY20012 spending on information commodities was \$583 million to \$591 million, respectively, and the projected spending for FY2013 is \$596 million, followed by a slight decline to \$590 million in FY2015. If the federal government established a strategic-sourcing program for information products and services, and if all federal agencies participated in the program, the government could realize total savings in the range of nearly \$90 million to \$360 million over the three-year period from FY2013 through FY2015 (see table 7, Appendix 1). These savings are based on discounts of 5 percent and 20 percent, respectively. Figure 18, below, depicts the estimations of growth in the information market by FY2015 under various discount scenarios.

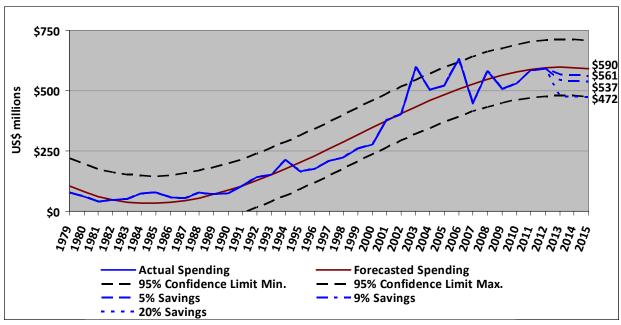


Figure 21. Projected Growth and Potential Savings in the Federal Information Market, FY2013–FY2015

These forecasts are derived from a statistical analysis of changes in the federal information market from FY1979 through FY2012. More specifically, the researcher fitted a cubic regression model to the data for FY1979 through FY2012 and used the model to derive forecasts for FY2013 through FY2015. The cubic regression line is shown in red in figure 18,

above, and the solid blue line depicts actual spending. Forecasts of spending at various savings rates are indicated by the red regression line and various dashed blue lines. ¹⁴

These projections of the future growth and potential savings in the information market are based on the assumption that all federal agencies would participate in a strategic-sourcing program for information products and services. Such calculations are illustrations of the economic usefulness of strategic sourcing, but they are also greatly simplified generalizations and unrealistic estimations based on the performance of existing FSSI programs. In actuality, the number of federal agencies participating in the three currently available FSSI programs has varied. Six agencies have participated in the wireless-services program, and 155 agencies have participated in the program for domestic delivery services, for example. 15

If these growth and savings scenarios were recalculated to include variations in federal-agency participation, a richer, more detailed picture of potential savings through strategic sourcing would emerge. However, such an exercise is beyond the scope of this report, because it entails creating numerous scenarios in which agencies do or do not participate in strategic sourcing to varying extents and at varying discount rates. In order to gain some estimation of the different savings that could be realized if varying proportions of agencies participated in an information-commodity FSSI program, more limited calculations were made of savings based on varying proportions of spending through such an FSSI program at varying discount rates. Specifically, calculations were made of spending and savings on information products and services if one-fourth, one-third, and one-half of such spending occurred at 5-percent, 9-percent, and 20-percent discount rates.

The findings, which are detailed in table 7 (see Appendix 1) and depicted in figure 22, below, are that total savings on federal spending on information commodities would vary from almost \$20 million if one-fourth of such spending occurred at a 5-percent discount to nearly \$360 million if all of this spending occurred at a 20-percent discount. In figure 22, the tops of the colored bar segments indicate the spending levels at different discount rates. For example, spending on information commodities at a 5-percent discount is depicted by the top of the orange segments, spending at a 9-percent discount is depicted by the top of the yellow segments, and so

¹⁴ The equation for the cubic regression is $Y=103.71 - 27 X + 2.83 X^2 - 0.05 X^3$; $R^2=0.94$, and model standard error of equation is 53.8.

¹⁵ U.S. General Services Administration, "Strategic Sourcing Metrics."

forth. Future spending estimates with no discount are depicted by the red bar on the left of the graph.

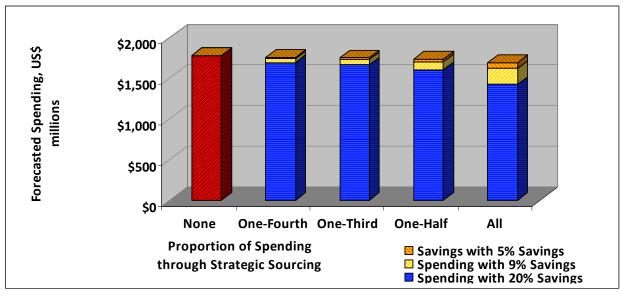


Figure 22. Total Spending Projections Based on Various Strategic-Sourcing Scenarios, FY2013-FY2015

APPENDIX 1. Estimated Spending and Savings Projections

Table 6. Projected Growth and Savings in the Federal Information Market, FY2013-FY2015

	20	13	20	14	20	15		Total	
Savings	Spending	Savings	Spending	Savings	Spending	Savings	Spending	Savings	Average Annual Savings
No FSSI	\$596.3	\$0	\$595.4	\$0	\$590.1	\$0	\$1,781.8	\$0	\$0
5% savings	\$566.5	\$29.8	\$565.6	\$29.8	\$560.6	\$29.5	\$1,692.7	\$89.1	\$29.7
9% savings	\$542.6	\$53.7	\$541.8	\$53.6	\$537.0	\$53.1	\$1,621.4	\$160.4	\$53.5
20% savings	\$477.1	\$119.3	\$476.3	\$119.1	\$472.1	\$118.0	\$1,425.4	\$356.4	\$118.8
All figures are	All figures are in US\$ millions.								

Table 7. FY2013-FY2015 Total Spending Projections Based on Strategic-Sourcing Spending

Proportion of	5% Discount		9% Dis	9% Discount		20% Discount			
Spending Through Strategic Sourcing	Spending	Savings	Spending	Savings	Spending	Savings			
None	\$1,781.8	\$0	\$1,781.8	\$0	\$1,781.8	\$0			
One-Fourth	\$1,759.5	\$22.3	\$1,741.7	\$40.1	\$1,692.7	\$89.1			
One-Third	\$1,752.4	\$29.4	\$1,728.8	\$52.9	\$1,664.2	\$117.6			
One-Half	\$1,737.2	\$44.5	\$1,701.6	\$80.2	\$1,603.6	\$178.2			
All	\$1,692.7	\$89.1	\$1,621.4	\$160.4	\$1,425.4	\$356.4			
All figures are in	n US\$ millions.	All figures are in US\$ millions.							

APPENDIX 2. Product Service Code Definitions

The U.S. General Services Administration (GSA) has established formal definitions for the product service codes (PSCs) that are utilized in federal-government procurement contracts. The following table includes the GSA's definitions for the 15 PSCs that are featured in this report.

Table 8. Formal Definitions of Product Service Codes

PSC	Definition
76	None. This is not a product service code, but a product service group, specifically books, maps, and other publications.
7610	Books and pamphlets. Includes: Technical and nontechnical books and pamphlets; regulations; instruction manuals; technical orders. Excludes: Sheet and book music; periodicals; bibles.
7630	Newspapers and periodicals.
7640	Maps, atlases, charts, and globes. Excludes: Training aid maps.
7641	Aeronautic maps, charts, and geodetic products.
7642	Hydrographic maps, charts, and geodetic products.
7643	Topographic maps, charts, and geodetic products.

Table 8. Formal Definitions of Product Service Codes

PSC	Definition
7644	Digital maps, charts, and geoditic products.
7650	Drawings and specifications. Includes: Federal, military, and departmental specifications.
7660	Sheet and book music. Excludes: Hymnbooks.
7670	Microfilm processed.
D317	IT and telecom— Web-based subscription. Includes: Subscriptions to data, electronic equivalent of books, periodicals, newspapers, etc.
L076	Technical representative–books, maps, and other publications.
R605	Support–administrative: Library.
R612	Support–administrative: Information retrieval. Includes: services related to search and storage of text, images, video, and other such data.

Source: U.S. General Services Administration, Office of Governmentwide Policy, *Federal Procurement Data System, Product and Service Codes Manual* (Washington, DC: August 2011), 66–202. https://www.acquisition.gov/PSC%20Manual%20-%20Final%20-%2011% 20August% 202011.pdf (accessed September 12, 2011).

APPENDIX 3. Major Vendors for Major Information Commodities, FY2009-FY2013 Q2

The tables below provide spending data for the top vendors of the top information commodities for the most recent five fiscal years, FY2009 through FY2013 Q2. Five information products and services have accounted for \$2.3 billion in federal spending on information commodities in this five-year period, nearly 96 percent of the \$2.4 billion spent in that time period. The following tables provide details of spending on those commodities in that five-year span and the top 10 vendors for each commodity.

Table 9. Federal Information Market, Products and Services, FY2009–FY2013 Q2

Products and Services (Product Service Code)	Contracts (in \$ millions)	Percentage of Total Contracts
Books and pamphlets (7610)	\$615.5	25.3%
Web-based subscriptions (D317)	\$464.6	19.1%
Administrative support: Information retrieval (R612)	\$455.6	18.7%
Administrative support: Library (R605)	\$441.1	18.1%
Newspapers and periodicals (7630)	\$363.0	14.9%
Drawings and specifications (7650)	\$26.9	1.1%
Digital maps, charts, and geoditic products (7644)	\$26.7	1.1%
Technical representation services— Books, maps, other publications (L076)	\$21.1	0.9%
Maps, atlases, charts, and globes (7640)	\$7.9	0.3%
Aeronautical maps, charts, and geodesic products (7641)	\$4.9	0.2%
Microfilm processed (7670)	\$3.0	0.1%

Table 9. Federal Information Market, Products and Services, FY2009–FY2013 Q2

Products and Services (Product Service Code)	Contracts (in \$ millions)	Percentage of Total Contracts
Topographic maps, charts, and geodesic products (7643)	\$1.9	0.1%
Hydrographic maps, charts, and geodesic products (7642)	\$1.4	0.1%
Sheet and book music (7660)	\$0.6	0.0%
Books, maps, other publications (76)	\$0.0	0.0%
Total	\$2,434.2	100%

In tables 10 and 11 vendors are listed as stated in FPDS–NG, and parent companies are listed in parentheses after their subsidiaries, such as "Bureau of National Affairs (Bloomberg)." It should also be noted that while some contractor names in tables 9 and 10 are enigmatic and unclear—namely "Miscellaneous Foreign Awardee" and "Miscellaneous Foreign Contractor"—these are the contract awardees as listed in the FPDS–NG.

Table 10. Top 50 Contractors in the Federal Information Market, FY1979–FY2013 Q2

	Contractor (Parent Company in Parentheses)	Contracts (in \$ millions)	Pct. of All Contracts
1	Reed Elsevier	\$442.4	4.8%
2	Space Imaging (GeoEye)	\$392.8	4.3%
3	West Publishing Corp. (Thomson Reuters)	\$354.5	3.9%
4	DynCorp Information Systems (Computer Sciences Corp.)	\$265.4	2.9%
5	Ebsco	\$260.1	2.8%

Table 10. Top 50 Contractors in the Federal Information Market, FY1979–FY2013 $\,$ Q2 $\,$

	Contractor (Parent Company in Parentheses)	Contracts (in \$ millions)	Pct. of All Contracts
6	Arctic Slope Regional Corp.	\$260.0	2.8%
7	DigitalGlobe	\$175.9	1.9%
8	Gartner, Inc.	\$165.1	1.8%
9	IHS Global	\$148.1	1.6%
10	Swets & Zeitlinger	\$117.1	1.3%
11	American Chemical Society	\$105.9	1.2%
12	LABAT-Anderson	\$102.0	1.1%
13	Lockheed Martin Corp.	\$101.0	1.1%
14	XMCO Inc. (Koniag)	\$99.4	1.1%
15	Dun & Bradstreet	\$77.5	0.8%
16	Faxon	\$77.4	0.8%
17	Cenveo	\$75.2	0.8%
18	CCH, Inc. (Wolters Kluwer)	\$70.9	0.8%
19	Miscellaneous Foreign Contractors	\$69.6	0.8%
20	Alaska Newspapers Inc. (Calista)	\$69.1	0.8%
21	McGraw-Hill Companies Inc	\$69.0	0.8%
22	Basch Subscriptions, Inc.	\$66.1	0.7%
23	Pearson Education, Inc. (Pearson)	\$64.7	0.7%

Table 10. Top 50 Contractors in the Federal Information Market, FY1979–FY2013 $\,$ Q2 $\,$

	Contractor	Contracts	Pct. of All
	(Parent Company in Parentheses)	(in \$ millions)	Contracts
24	Techna-Graphics	\$62.6	0.7%
25	Computer Sciences Corp.	\$59.5	0.6%
26	Bureau of National Affairs (Bloomberg)	\$56.6	0.6%
27	Readmore	\$53.7	0.6%
28	Information International Associates	\$53.6	0.6%
29	GCI Information Services	\$52.6	0.6%
30	Alutiiq Business Services (Afognak Native Corp.)	\$50.0	0.5%
31	Primus Solutions	\$49.8	0.5%
32	Choicepoint (Reed Elsevier)	\$45.2	0.5%
33	CSR, Inc.	\$41.8	0.5%
34	Andrulis Corp. (Dynamics Research Corp.)	\$41.2	0.4%
35	Internet Systems, Inc.	\$39.0	0.4%
36	International Health Terminology Standards Development Organisation	\$38.4	0.4%
37	TBG Inc	\$38.1	0.4%
38	Southern Bell (AT&T)	\$36.4	0.4%
39	Golden Books Publishing Company	\$35.9	0.4%
40	Ovid Technologies (Wolters Kluwer)	\$35.5	0.4%
41	Cartech Inc	\$35.4	0.4%

Table 10. Top 50 Contractors in the Federal Information Market, FY1979–FY2013 $\,$ Q2 $\,$

	Contractor (Parent Company in Parentheses)	Contracts (in \$ millions)	Pct. of All Contracts
42	Dialog, LLC	\$35.2	0.4%
43	Key Book Service	\$35.2	0.4%
44	Academy for Educational Development	\$34.6	0.4%
45	Great Atlantic News, LLC	\$34.5	0.4%
46	Logical Technical Services (Sentrillion)	\$32.8	0.4%
47	Wilson Information Services	\$32.5	0.4%
48	American Overseas Book Co.	\$32.4	0.4%
49	Hewlett-Packard	\$32.1	0.3%
50	Thomson Reuters (Scientific) LLC (Thomson Reuters)	\$31.8	0.3%
	Total	\$4,755.5	51.8%

Table 11. Top 50 Contractors in the Federal Information Market, FY2009–FY2013 Q2

	Contractor (Parent Company in Parentheses)	Contracts (in \$ millions)	Pct. of All Contracts	Last Five Years as Pct. of All Years
1	Reed Elsevier	\$222.8	8.0%	50.4%
2	West Publishing Corp. (Thomson Reuters)	\$167.3	6.0%	47.2%
3	Arctic Slope Regional Corp.	\$135.1	4.8%	51.9%
4	Ebsco	\$96.4	3.4%	37.0%
5	Swets & Zeitlinger	\$85.9	3.1%	73.4%

Table 11. Top 50 Contractors in the Federal Information Market, FY2009-FY2013 Q2

	Contractor (Parent Company in Parentheses)	Contracts (in \$ millions)	Pct. of All Contracts	Last Five Years as Pct. of All Years
6	American Chemical Society	\$76.6	2.7%	72.4%
7	Dun & Bradstreet	\$57.0	2.0%	73.5%
8	Misc. Foreign Contractors/ Awardees	\$50.7	1.8%	72.8%
9	Alutiiq Business Services (Afognak Native Corp.)	\$50.0	1.8%	100.0%
10	Computer Sciences Corp.	\$46.0	1.6%	77.3%
11	Pearson Education, Inc. (Pearson)	\$43.9	1.6%	67.8%
12	Alaska Newspapers Inc. (Calista)	\$40.1	1.4%	58.0%
13	IHS Global	\$37.1	1.3%	25.1%
14	Primus Solutions	\$36.4	1.3%	73.2%
15	Basch Subscriptions	\$34.3	1.2%	51.8%
16	International Health Terminology Standards Development Organisation	\$30.0	1.1%	78.0%
17	Dialog, LLC	\$26.2	0.9%	74.5%
18	XMCO Inc.	\$24.5	0.9%	24.6%
19	Library Associates, Inc.	\$22.6	0.8%	79.3%
20	McGraw-Hill Companies Inc	\$22.5	0.8%	32.6%
21	Ovid Technologies	\$22.3	0.8%	62.8%
22	Quickseries Publishing Inc.	\$21.6	0.8%	74.5%
23	Hewlett-Packard	\$21.4	0.8%	66.6%
24	CCH, Inc.	\$20.9	0.7%	29.5%
25	Great Atlantic News	\$20.8	0.7%	60.3%

Table 11. Top 50 Contractors in the Federal Information Market, FY2009-FY2013 Q2

	Contractor (Parent Company in Parentheses)	Contracts (in \$ millions)	Pct. of All Contracts	Last Five Years as Pct. of All Years
26	Mackin Book Company	\$20.5	0.7%	84.5%
27	New Directions Technologies	\$17.3	0.6%	61.0%
28	ProQuest LLC	\$17.1	0.6%	54.6%
29	Thomson Reuters (Scientific)	\$17.0	0.6%	53.3%
30	Advanced Educational Products	\$16.5	0.6%	69.0%
31	CQ-Roll Call	\$14.6	0.5%	86.6%
32	Wilson Information Services Corp.	\$14.5	0.5%	44.8%
33	GRB Environmental Services	\$14.4	0.5%	53.2%
34	LABAT-Anderson	\$13.8	0.5%	13.5%
35	Bureau of National Affairs (Bloomberg)	\$13.7	0.5%	24.2%
36	Bloomberg	\$12.5	0.4%	60.7%
37	Cox Subscriptions	\$12.3	0.4%	82.8%
38	Complete Book and Media Supply	\$12.0	0.4%	65.7%
39	Logical Technical Services (Sentrillion)	\$11.4	0.4%	34.9%
40	Information International Associates	\$11.3	0.4%	21.0%
41	K4 Solutions, Inc	\$11.0	0.4%	100.0%
42	ICF Macro, Inc.	\$11.0	0.4%	43.6%
43	Science Applications International Corp.	\$10.9	0.4%	35.6%
44	All Native Services	\$10.9	0.4%	61.0%
45	2020 Company LLC	\$10.6	0.4%	86.1%

Table 11. Top 50 Contractors in the Federal Information Market, FY2009-FY2013 Q2

	Contractor (Parent Company in Parentheses)	Contracts (in \$ millions)	Pct. of All Contracts	Last Five Years as Pct. of All Years
46	Gartner, Inc.	\$10.4	0.4%	6.3%
47	Heitech Services Inc	\$10.1	0.4%	94.8%
48	John Wiley & Sons, Inc.	\$9.6	0.3%	77.1%
49	Channing Bete Company, Inc.	\$9.3	0.3%	42.2%
50	LRP Publications, Inc.	\$9.2	0.3%	49.5%
Total		\$1,734.0	62.1%	

Table 12. Top Contractors for Books and Pamphlets (PSC 7610), FY2009–FY2013 Q2

	Contractor	Contracts (in \$ millions)	Pct. of All Contracts
1	American Chemical Society	\$61.7	10.0%
2	West Publishing Corp.	\$46.5	7.6%
3	Pearson Education, Inc.	\$41.5	6.7%
4	Ebsco	\$30.1	4.9%
5	Basch Subscriptions, Inc.	\$29.2	4.7%
6	Reed Elsevier	\$24.5	4.0%
7	Miscellaneous Foreign Contractors	\$22.3	3.6%
8	Mackin Book Company	\$19.7	3.2%
9	Quickseries Publishing Inc.	\$18.1	2.9%

Table 12. Top Contractors for Books and Pamphlets (PSC 7610), FY2009–FY2013 Q2

Contractor	Contracts (in \$ millions)	Pct. of All Contracts
10 XMCO Inc.	\$17.5	2.8%
Total	\$311.3	50.6%

Table 13. Top Contractors for Web-Based Subscriptions (PSC D317), FY2008–FY2012

	Contractor	Contracts (in \$ millions)	Pct. of All Contracts
1	West Publishing Corp.	\$72.2	14.7%
2	Reed Elsevier	\$66.6	13.6%
3	Dialog, LLC	\$31.9	6.5%
4	International Health Terminology Standards Development Organisation	\$30.0	6.1%
5	Computer Sciences Corp.	\$16.7	3.4%
6	New Directions Technologies	\$13.7	2.8%
7	Dun & Bradstreet	\$10.9	2.2%
8	Ebsco	\$10.8	2.2%
9	IHS Global	\$10.1	2.1%
10	GovDelivery, Inc.	\$8.5	1.7%
_	Total	\$271.5	55.4%

Table 14. Top Contractors for Administrative Support: Information Retrieval (PSC R612), FY2009–FY2013 Q2

	Contractor	Contracts (in \$ millions)	Pct. of All Contracts
1	Reed Elsevier	\$57.7	12.7%
2	Dun & Bradstreet	\$44.0	9.7%
3	Primus Solutions	\$42.4	9.3%
4	West Publishing Corp.	\$30.2	6.6%
5	Hewlett-Packard	\$19.3	4.2%
6	Bloomberg	\$8.8	1.9%
7	IHS Global	\$8.6	1.9%
8	Science Applications International Corp.	\$8.4	1.8%
9	ICF Macro, Inc.	\$7.8	1.7%
10	California Department of Public Health	\$7.3	1.6%
	Total	\$234.4	51.5%

Table 15. Top Contractors for Administrative Support: Library (PSC R605), FY2009–FY2013 Q2

	Contractor	Contracts (in \$ millions)	Pct. of All Contracts
1	Arctic Slope Regional Corp.	\$104.5	23.7%
2	Computer Sciences Corp.	\$25.7	5.8%
3	Library Associates, Inc.	\$20.2	4.6%

Table 15. Top Contractors for Administrative Support: Library (PSC R605), FY2009–FY2013 Q2

	Contractor	Contracts (in \$ millions)	Pct. of All Contracts
4	Ebsco	\$15.3	3.5%
5	LABAT-Anderson	\$13.1	3.0%
6	Wilson Information Services Corp.	\$11.0	2.5%
7	GRB Environmental Services	\$10.3	2.3%
8	K4 Solutions, Inc	\$9.0	2.0%
9	Information International Associates	\$8.9	2.0%
10	2020 Company LLC	\$8.9	2.0%
	Total	\$226.9	51.4%

Table 16. Top Contractors for Newspapers and Periodicals (PSC 7630), FY2009–FY2013 Q2 $\,$

	Contractor	Contracts (in \$ millions)	Pct. of All Contracts
1	Swets & Zeitlinger	\$59.0	16.2%
2	Reed Elsevier	\$52.5	14.5%
3	Ebsco	\$33.9	9.4%
4	Miscellaneous Foreign Contractors	\$17.7	4.9%
5	Great Atlantic News	\$16.4	4.5%
6	West Publishing Corp.	\$14.3	3.9%

Table 16. Top Contractors for Newspapers and Periodicals (PSC 7630), FY2009–FY2013 Q2

	Contractor	Contracts (in \$ millions)	Pct. of All Contracts
7	Thomson Reuters (Scientific) LLC	\$11.2	3.1%
8	CQ-Roll Call	\$10.5	2.9%
9	ProQuest LLC	\$8.0	2.2%
10	Basch Subscriptions, Inc.	\$7.7	2.1%
	Total	\$231.2	63.7%

BIBLIOGRAPHY

- GeoEye. "About Us." http://www.geoeye.com/CorpSite/about-us/ (accessed July 29, 2011).
- Hardy, Michael. "Fixing the Next Generation Procurement Data System." *Federal Computer Week* 19, no. 40 (November 21, 2005): 65–66 (accessed via ProQuest, document ID 218835006).
- Hayward, Cathy. "Reforming the Old Bill." *Supply Management*, January 4, 2011, 20–23 (accessed via ProQuest, document ID 222195677).
- Ivey, William Noël. "Federal Government Strategic Sourcing of Information Products and Services." Report, Federal Research Division, Library of Congress, Washington, DC, December 2011. http://www.loc.gov/flicc/publications/FRD/Strategic-Sourcing-Version-2 2011-Dec-5-Corrected.pdf (accessed April 15, 2012).
- Niezen, Carlos, Wulf Weller, and Heidi Deringer. "Strategic Supply Management." *MIT Sloan Management Review* 48, no. 2 (Winter 2007): 7 (accessed via ProQuest, document ID 2224964805).
- U.S. Census Bureau. 2007 NAICS Definitions. Washington, DC: 2007. http://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart=2007 (accessed July 19, 2011).
- U.S. General Services Administration. "About Strategic Sourcing." http://strategicsourcing. gov/about-strategic-sourcing (accessed July 26, 2011).
- U.S. General Services Administration. "Frequently Asked Questions About FPDS-NG." https://www.acquisition.gov/faqs_whataboutfpds.asp#q16 (accessed July 28, 2011).
- U.S. General Services Administration. "Strategic Sourcing Metrics." http://strategicsourcing. gov (accessed November 16, 2011).
- U.S. General Services Administration. Office of Governmentwide Policy. *Federal Procurement Data System, Product and Service Codes Manual*. Washington, DC, August 2011. https://www.acquisition.gov/PSC%20Manual%20-%20Final%20-%2011%20August% 202011.pdf (accessed September 12, 2011).
- U.S. Government Accountability Office (GAO). "Improvements Needed to the Federal Procurement Data System–Next Generation." Report no. GAO-05-960R. Washington, DC, September 27, 2005. http://www.gao.gov/assets/100/93613.pdf (accessed August 6, 2012).
- U.S. Office of Management and Budget. "Implementing Strategic Sourcing." Memorandum. Washington, DC, May 20, 2005. http://www.uspto.gov/web/offices/ac/comp/proc/OMBmemo.pdf (accessed July 15, 2011).

- U.S. Office of Management and Budget. *USAspending.gov*. http://usaspending.gov/ (accessed July 20, 2011).
- USAspending.gov. "Learn About USAspending.gov." http://usaspending.gov/learn?tab=FAQ (accessed April 15, 2012).